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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,301	05/10/2001	Naoto Kinjo	Q63870	3820

7590 12/10/2004  
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EXAMINER

THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/852,301

Applicant(s)

KINJO, NAOTO

Examiner

James A Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2001 and 10 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278).

**Regarding claim 1:** Hayashi discloses previously setting at least one user command representing a condition of an image or a direction of correction of the image (column 16, lines 19-24 of Hayashi), and at least one image correction condition corresponding to the user command (figure 12 and column 16, lines 21-24 of Hayashi); inputting the user command as a correction instruction according to the image (figure 12 ("EXEC", "USE PREVIOUS VALUE", and "NOT EXECU") and column 16, lines 25-31 of Hayashi); and correcting the image under the corresponding image correction condition (column 16, lines 33-42

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of Hayashi) according to the user command (column 16, lines 25-31 of Hayashi).

Hayashi does not disclose expressly that said user command is a verbal expression.

Bernardi discloses inputting a user command as a verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input user commands as voice recognized verbal expressions, as taught by Bernardi, and thus previously set, input, correct according to said commands, as taught by Hayashi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi to obtain the invention as specified in claim 1.

**Regarding claim 2:** Hayashi discloses that a plurality of image correction conditions of different intensities are set with respect to the user command (column 16, lines 33-42 of Hayashi). The user inputs the command to either update the conversion able or use the previous value (column 16, lines 19-24 of Hayashi). The system, based on this command, updates the reference data used to correct the conversion table, said conversion table being used for copying (column 16, lines 8-14 of Hayashi). If the conversion table is updated, then the plurality of image correction conditions will clearly have different intensities since the corresponding values are different (column 17, lines 4-9 of Hayashi). Therefore, for a

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single user command, a plurality of image correction conditions of different intensities are set.

Hayashi further discloses that a plurality of images corrected under the image correction conditions are reproduced according to the input user command (column 14, lines 24-30 of Hayashi).

As discussed above in the arguments regarding claim 1, upon which claim 2 is dependent, Hayashi in view of Bernardi teaches that said user commands are input as verbal expressions.

**Regarding claim 3:** Hayashi discloses that reference data used to correct the conversion table is repeatedly updated (column 16, lines 10-18 of Hayashi) until the user decides that the previous result is sufficient (column 16, lines 19-24 of Hayashi). Therefore, a relationship between the user command first input with respect to the image and correction of the image finally made is totalized, said totalization being the cumulative result of updating the reference data used to correct the conversion table (column 16, lines 10-24 of Hayashi). Further, since the final result of said totalization is used to correct the image (column 16, lines 10-14 and lines 21-24 of Hayashi), then image correction condition corresponding to the user command is updated according to a result of totalization (column 16, lines 8-14 of Hayashi).

As discussed above in the arguments regarding claim 1, upon which claim 3 is dependent, Hayashi in view of Bernardi teaches that said user commands are input as verbal expressions.

**Regarding claim 7:** Hayashi discloses that a condition setting algorithm of image processing is updated according to the result of the totalization (column 16, lines 8-14 of Hayashi). The reference data is used to correct the conversion

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table and said reference data is updated (column 8-14 of Hayashi). Therefore, a condition setting algorithm, namely the condition by which the image data is converted using said conversion table, is updated when said reference data is updated. Since said updating is performed until a desired result is achieved (column 16, lines 21-24 of Hayashi), the totalized result is used to update said condition setting algorithm.

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Wong (US Patent 6,557,102 B1).

**Regarding claim 4:** Hayashi in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, as discussed above in the arguments regarding claim 3, upon which claim 4 is dependent.

Hayashi in view of Bernardi does not disclose expressly that image scenes of the images are sorted by using image characteristic values of the images and the totalization is performed for each of the image scenes sorted.

Wong discloses sorting image scenes of images (column 5, lines 29-32 of Wong) by using image characteristic values of the image (column 5, lines 49-53 and lines 57-59 of Wong).

Hayashi in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization

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taught by Hayashi on said sorted images. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with Hayashi in view of Bernardi to obtain the invention as specified in claim 4.

**Regarding claim 5:** Hayashi in view of Bernardi discloses that a relationship between the verbal expression first input with respect to the image and the correction of the image finally made is totalized, and the image correction condition corresponding to the verbal expression is updated according to the result of totalization, as discussed above in the arguments regarding claim 3, upon which claim 5 is dependent.

Hayashi in view of Bernardi does not disclose expressly that, when the image is reproduced on a photographic print, the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned; and that said sorting is performed before said totalization is performed for each sorting process.

Wong discloses that, when the image is reproduced on a photographic print (column 3, lines 52-57 of Wong), the image is sorted according to at least one of printing method, type of printing paper, printer model, individual printer used, operator using the printer, and laboratory store concerned (column 5, lines 57-59 of Wong). The image is originally captured on a photographic print (column 3, line 56 of Wong) and then digitized (column 3, lines 52-57 of Wong). The digitization of the film is part of the sorting process since, when an image is

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scanned in (column 4, lines 60-65 of Wong), it is archived according to various image properties (column 5, lines 57-59 of Wong).

Hayashi in view of Bernardi is combinable with Wong because they are from the same field of endeavor, namely image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to sort the images, as taught by Wong, and then perform the totalization taught by Hayashi on said sorted images for each sorting process. The motivation for doing so would have been to be able to determine the authenticity of an image by being able to examine the data associated with the image (column 2, lines 24-29 of Wong). Therefore, it would have been obvious to combine Wong with Hayashi in view of Bernardi to obtain the invention as specified in claim 5.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Hisatake (US Patent 5,669,040).

**Regarding claim 6:** Hayashi discloses that a plurality of image correction conditions having different image correcting algorithms are set with respect to the user command (figure 12 and column 14, lines 19-24 of Hayashi); and image correction is performed by selecting one of the image correction conditions (column 14, lines 24-26 of Hayashi).

As discussed above in the arguments regarding claim 1, upon which claim 6 is dependent, Hayashi in view of Bernardi teaches that said user commands are input as verbal expressions.



Hayashi in view of Bernardi does not disclose expressly that a number of times each of the image correction conditions is selected is totalized; and a priority order of each of the plurality of image correction conditions is updated according to a result of totalization.

Hisatake discloses a number of times (figure 4a("job amount") of Hisatake) each of the image output conditions (figure 4a("copy", "fax", "print") of Hisatake) is selected is totalized (figure 4a and column 10, lines 23-30 of Hisatake); and a priority order of each of the plurality of image output conditions is updated according to a result of totalization (figure 4b and column 53-58 of Hisatake).

Hayashi in view of Bernardi is combinable with Hisatake because they are from similar problem solving areas, namely the prioritization of computational operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform prioritization as taught by Hisatake on the image correction conditions taught by Hayashi. The motivation for doing so would have been to more efficiently operate a limited-capacity computational device. Therefore, it would have been obvious to combine Hisatake with Hayashi in view of Bernardi to obtain the invention as specified in claim 6.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and Enomoto (US Patent 6,034,759).

**Regarding claim 8:** Hayashi in view of Bernardi does not disclose expressly that density control according to a result of extraction of an essential portion is included as image

processing, and recomputation of an amount of density control according to the result of extraction of the essential portion is included as an image correction according to the verbal expression.

Enomoto discloses performing density control according to a result of extraction of an essential portion (column 11, lines 45-49 of Enomoto), and recomputing an amount of density control according to the result of extraction of the essential portion (column 11, lines 50-51 and equation 1 of Enomoto). Controlling the exposure amount (column 11, lines 45-49 of Enomoto) inherently controls the density since the density is related to the exposure amount, as shown in detail in column 11, line 50 to column 12, line 20 of Enomoto.

Hayashi in view of Bernardi is combinable with Enomoto because they are from the same field of endeavor, namely digital image data processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide density control for the image, as taught by Enomoto. The motivation for doing so would have been provide optimal printing for the principal portion of the image (column 1, lines 46-49 of Enomoto). Therefore, it would have been obvious to combine Enomoto with Hayashi in view of Bernardi to obtain the invention as specified in claim 8.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US Patent 6,271,934 B1) in view of Bernardi (US Patent 6,021,278) and well-know prior art.

**Regarding claim 9:** Hayashi discloses a numerical input mode to input the correction instruction (figure 11 and column 14, lines 11-18 of Hayashi).

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Hayashi does not disclose expressly that, in correction processing of the image, switching is performed between a verbal input mode for inputting the verbal expression and a numerical input mode to input the correction instruction.

Bernardi discloses a verbal input mode for inputting the verbal expression (column 3, lines 21-25 of Bernardi).

Hayashi and Bernardi are combinable because they are from similar problem solving areas, namely inputting user commands into an image processing system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input user commands as voice recognized verbal expressions, as taught by Bernardi. The motivation for doing so would have been to allow for remote operation of the device (column 1, lines 16-18 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Hayashi..

Hayashi in view of Bernardi does not disclose expressly that switching is performed between said verbal input mode and said numerical input mode.

**Official notice is given** that switching between two modes of input is old, well-known and expected in the art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to switch between said verbal input mode taught by Bernardi and said numerical input mode taught by Hayashi. The motivation for doing so would have been have multiple possible ways of entering data, depending upon user preference, and in case one form of input does not work well for a particular user or in particular circumstances.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Thompson whose telephone number is 703-305-6329. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson  
Examiner  
Art Unit 2624

JAT  
06 December 2004



THOMAS D  
~~THOMAS~~ LEE  
PRIMARY EXAMINER